

Enzyme activity of fungi.—With a view of ascertaining the manner of destruction of wood by *Lenzites saepiaria*, ZELLER²² has made a general study of the enzymes in the mycelium and sporophores of that fungus. Enzyme preparations of the mycelium were made by extraction of dried and ground cultures of the fungus grown on sawdust. The enzyme mixture precipitated from the extract by means of alcohol was collected on filter paper and preserved dry. Preparations from the fruit bodies were made in a similar manner. From the activities exhibited by the powder thus obtained, the author concludes that the following groups of enzymes are present in the mycelium and sporophores of *Lenzites saepiaria*: (1) of the esterases chiefly those affecting the hydrolysis of the esters of the lower fatty acids; (2) of the carbohydrases, maltase, invertase, raffinase, diastase, innulase, ligninase (by which the author designates CZAPEK'S "hadromase"), cellulase, hemicellulase, and pectinase; (3) of other enzymes, emulsin, tannase, urease, hippuricase, nuclease, proteinases, rennetase, oxidase, and catalase.

It is of interest to note that in cultures of the fungus on resin agar emulsions containing a gradually increasing percentage of resin, growth was only slightly depressed in emulsions containing up to 50 per cent of resin. In emulsions containing over 50 per cent of resin growth is sharply depressed, while in those containing over 85 per cent growth is practically inhibited.—H. HASSELBRING.

Texas root rot.—DUGGAR²³ reports the finding of a conidial stage of the Texas root rot fungus, *Ozonium omnivorum* Shear, one of the most destructive fungous diseases of the cotton crop. The conidia-bearing hyphae usually occur in patches on the bare ground between the rows of plants and only rarely in connection with the roots themselves. They are borne on swollen or club-shaped branches recalling the conidiophores of some species of *Botrytis*. The spore powder which covers the ground of the fertile patches is pinkish buff. The fungus is tentatively placed in the hyphomycete genus *Phymatotrichum* as *P. omnivorum* (Shear) Duggar.—H. HASSELBRING.

Vegetation of Long Island.—HARPER²⁴ has published a list of the plants found growing on a part of Long Island which is really within the limits of New York City. It will serve for comparison with adjacent areas and as a record of the natural vegetation of an area which may soon become in reality a part of a densely populated city.—GEO. D. FULLER.

²² ZELLER, S. M., Studies in the physiology of the fungi. II. *Lenzites saepiaria* Fries, with special reference to enzyme activity. Ann. Mo. Bot. Gard. 3:439-512. pls. 2. 1916.

²³ DUGGAR, B. M., The Texas root rot fungus and its conidial stage. Ann. Mo. Bot. Gard. 3:11-23. 1916.

²⁴ HARPER, R. M., The natural vegetation of western Long Island south of the terminal moraine. Torreya 17:1-13. 1917.